For this reason, an innovation in means of ground escape from aircraft is shown in the mock-up. A device known as the Davy Automatic Fire Escape has been installed at the pilot's window, the sextant hatch, overwing hatch, and the tail section emergency exit in the mock-up. The device lowers persons or objects, one at a time, at a uniform rate of speed through a pre-determined distance based on the length of cotton covered cable which is available to run through the mechanism.

The Davy Escape is not new, being originally patented in 1906, and is approved by the Bureau of Standards and Appeal, New York City. The mechanisms installed in the mock-up are the standard commercial model.

DITCHING

The principal escape point for ditching is the overwing hatch, although the top of the fuselage and wing are accessible through the pilot's windows and the sextant hatch as well.

The life raft compartment may be opened and, if desired, the raft may be inflated while standing in the overwing hatch. The raft, accessory kits and radio transmitter may be removed to either wing by one or more persons. Flush steps are provided in the fuselage to assist in this operation. A 55 ft. cotton rope is stowed in the compartment, one end anchored to the airplane, for lowering equipment or personnel over the trailing edge of the wing if required. In addition, a shorter rope is stowed at the overwing hatch, one end being attached to the airplane at that point. The other end may be snapped to anchors at the aft end of the life raft compartment to provide a secure hold for personnel removing equipment from the compartment.

STOWAGE OF EMERGENCY EQUIPMENT

Individual emergency equipment (chest parachute, seat type survival kit, and antiexposure suit) is stowed adjacent to the pilot, co-pilot, systems engineer and navigator stations. For the relief crew, parachutes and survival kits are stowed in a rack opposite the main radio rack while the antiexposure suits are in a small cabinet at the forward end of the relief crew quarters. Bail out oxygen bottles for all personnel are stowed adjacent to the entrance to the bail out chute.

One parachute, survival kit, antiexposure suit and bail out bottle are stowed on the lower deck adjacent to the crew entrance door for use by a crew member who may be on the lower deck at the time of bail out.